

Amendments to the Claims

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims

1-17. (Canceled)

18. (New) A printing method for printing an image by using a print head, wherein the print head has a plurality of chips deviated from each other in a column direction, each of the chips have a plurality of print elements aligned in the column direction, the plurality of print elements in each of the chips are divided into a plurality of groups, the print elements in each of the groups are allocated to a plurality of drive blocks corresponding to a plurality of time-division drive blocks, part of the print elements in the chips adjoining each other in the column direction are overlapped in a scan direction that crosses the column direction, the number of the overlapping print elements is equal in number to an integer times the number of the print elements constituting the group, the printing method comprising the steps of:

moving the print head and a print medium relative to each other in the scan direction; and

driving, while the print head and the print medium are relatively moved, the plurality of print elements in the print head on a time-division basis so that the print elements belonging to the same drive block have the same drive timing and the print elements belonging to a different drive block have different drive timings to print the image on the print medium.

19. (New) The printing method according to claim 18, wherein the overlapping print elements are selectively driven depending on a column position in the scan direction.

20. (New) The printing method according to claim 18, wherein the plurality of print elements in the print head are arranged in an entire widthwise printable range of the print medium.

21. (New) The printing method according to claim 18, wherein the plurality of print elements in the print head are ink jet print elements that can be activated to eject ink from nozzles.

22. (New) A printing apparatus for printing an image by using a print head, wherein the print head has a plurality of chips deviated from each other in a column direction, each of the chips have a plurality of print elements aligned in the column direction, the plurality of print elements in each of the chips are divided into a plurality of groups, the print elements in each of the groups are allocated to a plurality of drive blocks corresponding to a plurality of time-division drive blocks, part of the print elements in the chips adjoining each other in the column direction are overlapped in a scan direction that crosses the column direction, the number of the overlapping print elements is equal in number to an integer times the number of the print elements constituting the group, the printing apparatus comprising:

a moving unit that moves the print head and a print medium relative to each other in the scan direction; and

a driving unit that drives, while the print head and the print medium are relatively moved, the plurality of print elements in the print head on a time-division basis so that the print elements belonging to the same drive block have the same drive timing and the print elements belonging to a different drive block have different drive timings to print the image on the print medium.

23. (New) The printing apparatus according to claim 22, wherein the overlapping print elements are selectively driven depending on a column position in the scan direction.

24. (New) The printing apparatus according to claim 22, wherein the plurality of print elements in the print head are arranged in an entire widthwise printable range of the print medium.

25. (New) The printing apparatus according to claim 22, wherein the plurality of print elements in the print head are ink jet print elements that can be activated to eject ink from nozzles.

26. (New) A program for printing an image by using a print head, wherein the print head has a plurality of chips deviated from each other in a column direction, each of the chips have a plurality of print elements aligned in the column direction, the plurality of print elements in each of the chips are divided into a plurality of groups, the print elements in each of the groups are allocated to a plurality of drive blocks corresponding to a plurality of time-division drive blocks, part of the print elements in the chips adjoining each other in the column direction are overlapped in a scan direction that crosses the column direction, the number of the overlapping print elements is equal in number to an integer times the number of the print elements constituting the group, the program causing a computer to execute the steps of:

moving the print head and a print medium relative to each other in the scan direction; and

driving, while the print head and the print medium are relatively moved, the plurality of print elements in the print head on a time-division basis so that the print elements belonging to the same drive block have the same drive timing and the print elements belonging to a different drive block have different drive timings to print the image on the print medium.

27. (New) A storage media readable by a computer and storing the program of claim 26.

28. (New) A printing method for printing an image by using a print head, wherein the print head has a plurality of chips arranged in a column direction, each of the chips have a plurality of print elements aligned in the column direction, the plurality of print elements in each of the chips are divided into a plurality of groups arranged in the column direction, the plurality of print elements are allocated to a plurality of drive blocks corresponding to a plurality of time-division drive blocks, the print elements adjoining each other are allocated to different drive blocks, part of the print elements in the chips adjoining each other in the column direction are overlapped in a scan direction that crosses the column direction, the number of the overlapping print elements is equal in number to an integer times the number of the print elements constituting the group, the printing method comprising the steps of:

moving the print head and a print medium relative to each other in the scan direction; and

driving the plurality of print elements in the print head on a time-division basis to print the image on the print medium.

29. (New) The printing method according to claim 28, wherein the overlapping print elements are selectively driven depending on a column position in the scan direction.

30. (New) A printing apparatus for printing an image by using a print head, wherein the print head has a plurality of chips arranged in a column direction, each of the chips have a plurality of print elements aligned in the column direction, the plurality of print elements in each of the chips are divided into a plurality of groups arranged in the column direction, the plurality of print elements are allocated to a plurality of drive blocks corresponding to a plurality of time-division drive blocks, the print elements adjoining each other are allocated to different drive blocks, part of the print elements in the chips adjoining each other in the column direction are overlapped in a scan direction that crosses the column direction, the number of the overlapping print elements is equal in number to an integer times the number of the print elements constituting the group, the printing apparatus comprising:

a moving unit that moves the print head and a print medium relative to each other in the scan direction; and

a driving unit that drives the plurality of print elements in the print head on a time-division basis to print the image on the print medium.

31. (New) The printing apparatus according to claim 30, wherein the overlapping print elements are selectively driven depending on a column position in the scan direction.